

.The Texture of the Retina: Intertwining Patterns of Perception in the City. On Andrei Bely's *Petersburg* and Ingo Schulze's *33 Moments of Happiness*[1]

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Networks belong to the field of topographic description of a visual experience or phenomenon (Helbling 52).

As a textual microcosm in a novel, the city of St. Petersburg constitutes itself as a complex intertwining of elements that are in reality both perceptible and imperceptible. These can be interpreted as points referring to each other, but at the same time moving away from each other and making each other relative. The word “retina”[2] in the title is in this sense a metaphor, designating as it does the place where single visual sensations are collected and moved onwards through neural connections. At the same time, it is the place where the so-called “blind spot” is located, i.e. a certain hiatus, a zero point, which liberates itself from perceptual and apperceptual processes, thus becoming a place offering space for a fictitious game. The main goal of this contribution is to try to map the specific dynamics that emerge from such a site. In my view, the essential characteristics of this kind of dynamic are that different perception patterns cross each other dialogically and are mutual conditions of each other, thus creating a special pattern that emerges from their intertwining.

THE SMALL WORLD THEORY

Scientific surveys in the field of networks and complex organizational patterns have become increasingly popular, especially since the 1980s. Researchers have worked out different models, from among which the *small world theory* seems to be the one that allows for the most liberal and the broadest interpretations, consequently also including interpretations

that do not necessarily aim at drawing unequivocal and strict borderlines (cf. Buchanan).[3] Assuming that the network connections between single elements and their complexity of different levels could be interpreted as an universal phenomenon encouraged researchers in a number of scientific disciplines to explore a path along which the world seems to be open to being interpreted as a network on all of its levels and in accordance with specified premises of scientific description. In this respect, one of the most characteristic experiments is that conducted by the biologist Fritjof Capra, who sought to define the mechanisms of networks as the basis of all life by deriving them from biochemical, genetic and molecular biological ideas: "According to the theory of autopoiesis, the pattern of self-generating networks is one of the most definitive features of life" (30).[4]

The most fascinating characteristic of these and similar universalistic conceptions is that this discourse seems to represent nearly all scientific disciplines. The concept of networks is being taken from biology, primarily neural biology, cognitive science, mathematics and physics, as well as from ideas of mapping social organizational patterns that have been developed more or less parallel to conceptions of the natural sciences and applied in broader and broader fields (cf. Granovetter: "The Strength of Weak Ties" [1983]; Linhart 15-33; Watts and Duncan). This process has been considerably aided by the development of the World Wide Web. In the course of modelling and describing networks, researchers have made an effort to provide classificatory-type definitions: when investigating the different degrees of complexity and the architecture of networks, they aim at newer and newer definitions of concepts, as well as at their verification. The concepts of "aristocratic and egalitarian networks" (Buchanan 129-132, 134-135), of "strong and weak ties" (Granovetter: "The Strength of Weak Ties" [1973]), of the "tipping point" (Gladwell), and "mapping" testify to endeavours to provide systematic topographical descriptions of interconnections experienced in the most different of areas (Buchanan 66, 129-132, 173-174).

It may be argued, however, that these attempts at modelling can hardly be or can only indirectly be related to the perceptual and apperceptual processes to be discussed in this paper, even though the models mentioned above make full use of the vocabulary of spatial perception and take advantage of possibilities to spatially represent connections which cannot be directly perceived when visualizing network patterns, thus, depicting networks with the help of graphs or three-dimensional models. Disciplines engaged with neural processes and research programs aiming

at the mapping of interconnections among social “small groups” can be partly exonerated from the guilt of not taking into account the perceptible or non-perceptible character of certain phenomena, insofar as one can in these cases explore the efforts to reflect mechanisms of digesting the perceptions of the outside world (Granovetter: “Threshold Models”).

PERCEPTION

Without claiming perfection or aiming to establish a universal model of description, I will concentrate here on the two different patterns of spatially organized perception that are used in Andrei Bely's novel *Petersburg* and Ingo Schulze's collection of short stories *33 Moments of Happiness*. I will make use of the insight that human cognitive activity is mostly related to perception, and, more closely, to stimuli connected with visual abilities and their use within neural networks, as well as their dialogical assimilation within the frames of a social environment. Even though current discussions about the nature of perception and its representations – at least the more radical versions – see cognitive activity's dependence on language as a clear obstacle to being able to speak about perception at all (cf. Armstrong; Ducasse),[5] I prefer the assumption that human beings accept, digest and represent the stimuli of the outside world in a certain way, and that these representational moods (whether they are connected to language or any other medium) can inform us about the way one perceives and apperceives the environment. As opposed to older theories of perception, I find it important to shift the emphasis from an impartial, objective observer or perceiving subject. This change of emphasis does not necessarily result in the radical negation of the possibility to speak about perception itself:

It is indeed astonishing, to what extent the conception of the world, as well as the idea of perception alter, if the stereoscopic philosophy of the impartial person, who describes, is replaced by the insight of the sympathetic describing person. What's more, the logical (semantic) structure of both conceptions of the world fundamentally differs when we take into account language use, and what we call 'explanation.'" (Foerster 436)

If the subject of the description as an outsider is replaced by the subject as participant, the theory of depicting (*Abbildtheorie*) will be replaced by the principle of setting up an involved relation. In this context, the notion of “not being able to distance oneself,” i.e. the universal “net-like intertwining” between the subject and the perceived phenomena seems to be important, insofar as it allows the subject to be interpreted as a being

with a fundamental dialogical orientation. This principle assumes special importance when we try to understand perceptive processes and their representations in the framework of fiction.

THE PETERSBURG CONTEXT

Both texts to be discussed, which are removed from each other by 70 years, represent two specific models of perception. Still, one has to take into account that in both we are dealing with a special case of perception, i.e. with perceptual patterns effective in their diverging way in the context of a city.[6] The nature of the foundation and evolution of Petersburg became the breeding-ground of an entirely specific development in the history of the city and its myths. This was a result of a twofold constellation: on the one hand, it can be traced back to the rational plans determined by the city's founder, Peter the Great's strategic and political objectives; on the other, this 'ratioid,'[7] inorganic development helped certain irrational, chaotic forces come into being and to be represented. St. Petersburg was built on a foundation of mud by sacrificing tens of thousands of human lives and was exposed to devastating floods for more than a hundred years after its founding. The city's image was formed primarily as an object of literary and philosophical discourse after Pushkin and resulted in the fixing of *topoi* that are still effectual and still generate new interpretations and connotations. The notion of "the Petersburg text" was established and expounded by V. Toporov, who has laid out a specific view and presentation of the city as a dichotomy of forces which sprang from the collision of the horizontal axis of nature and the vertical axis of culture, as well as from the obliteration of temporal and spatial structures, the substitution of the center by the periphery and their interaction. The lack of (organic) history and the myth trying to fill up this hiatus are the focal points around which special literary and philosophical texts emerged, and which form, as Toporov puts it, the "substratum" of the Petersburg text (328). On grounds of an oppositional series of typographical elements, which can be traced back to language itself, Toporov considers various literary works as belonging to the Petersburg text (334-336). Both in Toporov's and in Lotman's[8] investigations, the spatial-semiotic construction of the city plays a pre-eminent role: a real and fictitious topology of the city emerges from the heterogeneity of closed and open, artificial and natural spaces, from places with eschatological or cosmological values, as well as out of the dynamism of the notion of "the border." All texts that have Petersburg as

their topic can be situated in this model. Lotman perceives the city as an eccentric one located on the periphery of cultural space and realizing the opposition of artificiality and naturalness. This allows for a twofold interpretation: on the one hand, reason overcomes natural forces; on the other, the natural order underlies a deformation (Lotman 131-133). Being the realization of an idea and a rationally conceived utopia, the city launches a complex semiotic mechanism, on the basis of which the city turns out to be a specific generator of culture: it becomes a melting-pot of heterogeneous multilingual and multi-coded elements, the scene of semiotic collisions (Lotman 135-136). Being situated at the intersection of such force fields results in hybridizations and changes of codes which can develop into mythological products, into a lack of history. Artificiality, on the other hand, reveals the theatrical and unrealistic character of the city, as well as helping to building up spaces of phantasmagoria (Lotman 137).

That is, myth-making seems to fill in the gap of city history, this hiatus as a "blind spot" of extensively heterogeneous meanings.

RECTANGLES AND FLASHES

Bely's novel, which was completed in 1916 but significantly shortened and revised in 1922, can be viewed as a part of this textual universe. Like his predecessors, Bely activates different pretexts of the city, basing his novel on philosophically tinged travel descriptions from the 18th and 19th centuries, on Pushkin's poems, as well as on Dostoevsky's and Gogol's novels and short-stories. Further semantic and symbolic layers are added to these pre-images: the principles of Apollo and Dionysus, which were adapted from Nietzsche's writings and which played an important role in the theory of Russian symbolism, elements of Eastern mythologies, conceptions of anthroposophy and ideas of Freemasonry, as well as features of the formative principles of Wagner's *Gesamtkunstwerk*.^[9] Still, the specificity and importance of Bely's novel stem primarily from the fact that the narrative pattern of the novel differs significantly from those of the texts of his predecessors: it operates with the narrative mode of *stream of consciousness*, which almost entirely abolishes temporal and spatial linearity and structure.^[10] Regarding the macrostructure of the novel, Renate Lachmann's thoughts seem to be worth recalling: "the fragmented narration and the doubled narrative sequence is re-formed by a layer of symbols that lays a net of semantic recurrences of forward, backward and cross-references onto the entire text" (90). The rhythmic recurrence of

elements is determined by a dual mechanism: on the one hand, a parodying of the canonized Petersburg text – the novel introduces a wide range of intertextual references; on the other hand, a dynamic confrontation of a geometrical “cosmos woven out of the net of avenues” and an “amorphous, ‘visionary, deceptive image’ [of the city] blurring in a greenish fog” (Lachmann 98).[11] The latter aspect can be interpreted as the interaction of two instances: the narrative structure reflects two different patterns of perception, i.e. that of father and son as protagonists opposed to each other. The father appears as an extreme manifestation of the Apollonian principle, as it is not only his figure but also his mode of perception that corresponds to artificially built-up geometrical space. His way of thinking is interrelated with the visually perceived, rectangular spatial forms:

[...] he yearned [...] for the entire round surface of the globe to be encircled by cubes of blackish-grey houses like the rings of a snake, for the entire earth, squeezed by avenues, to flash through the endlessness on its linear, cosmic course as a dead straight law; for the network of parallel avenues crossed by another network of avenues with their planes of rectangles and cubes to spread out itself to the endlessness of the universe: each inhabitant would have one rectangle [...]. (Bely 24)

In opposition to this, the mode of perception of the senator’s son, Nikolai, is determined by constant tension tending towards chaos, as he seems to carry the mystical bomb hidden in the sardine given to him by the rebel provocateur Dudkin, not only with him, but inside him as well. Nikolai is expected to attack his father by exploding the bomb:

[...] a phosphorescence spot rushed through the sky foggily and tremendously; the distant Neva was shrouded by fog, the surfaces of a plane, flying noiselessly, gleamed in green lights from time to time; a small reddish light kept flashing, it blinked for a while and then hushed away into the spreading mud. Over the Neva, the huge buildings of the islands were rising, and, silently and agonizingly, they bore their eyes into the fog and seemed to be crying. Upwards, some confused lines were insanely reaching out their arms, swarm after swarm came up over the Neva’s waves. (Bely 102)

Still, the contra-punctual dynamics between the geometrical space perception based on the Apollonian principle and focused on the figure of the father, on the one hand, and the perception of the chaotic, fantastic character of the city by the son, on the other, do not result in final disintegration. Two turning points in the *fabula* of the novel, i.e. the explosion of the bomb without greater harm and the return of the senator’s wife, allow the protagonists to step out of the space they have constituted, which leads to a radical change in their perception patterns. To escape the Petersburg space means, at the same time, to enter another one: the son

leaves for Egypt; the father returns to his estate. Both anti-places can be seen as corresponding to heterotopias, i.e. the compensational heterotopy described by Michel Foucault, the role of which is “is to create a space that is other, another real space, as perfect, as meticulous, as well arranged as ours is messy, ill constructed, and jumbled” (Foucault).[12]

The protagonists’ involvement in the (city) perception, as well as their net-like existence can be traced in Bely’s novel on different textual and narrative levels. On the one hand, it is the protagonists’ oppositionally arranged patterns of perception, determined by the contradictory nature and dynamics of the city itself, and on the other hand, the narrative level of the text, in which all these patterns manifest themselves. But before the tension can escalate, both on the plane of *discours*, as well as on that of *histoire*, a switch takes place to another space radically different from the first one, which can be interpreted as a “counter-site [...], a kind of effectively enacted utopia” (Foucault). At the same time, the question of being radically involved in perceptions becomes unnecessary, as this movement outwards is a “refuge from a space constructed mnemonically to opposite spaces,” where a new form of inward seeing and life can be realized, in contrast to the metropolis (Lachmann 120). The resolution, which stems from the dialogue between these two organizing principles, opens up a further space that can be imagined only outside the city.

MANY MOMENTS

Ingo Schulze’s collection of short stories *33 Moments of Happiness. From the Adventurous Notes of Germans in Petersburg* [*33 Augenblicke des Glücks. Aus den abenteuerlichen Aufzeichnungen der Deutschen in Piter*] presents a different model of space and perception. Even though the text, consisting of 33 loosely connected stories, is inscribed into the Petersburg text, it too constantly refers to the city’s literary pre-texts.[13]

Unlike in Bely’s *Petersburg*, the change or expansion of the determining textual constellation in Schultz’s stories is not realized through switching to another discursive level (in Bely’s case mostly a symbolist conception), nor through a reflection of this change in the protagonists’ perceptive mode constructed on the basis of a given constellation, but rather as a result of the fact that the text, already in its structure, radically denies any possible points of reference. The framing story (about the manuscript and its publication through a double mediation), as well as the presence of a non-unified narrator[14] of stories

without titles emphasize that any kind of unity can only be illusory. The genre of the texts cannot be reduced to a common denominator either: a story evoking the short stories of Russian realism is placed immediately between a text describing a fantastic event and a text mainly consisting of an inner monologue (Schulze 96-115). Not only the heterogeneity of the scenes (some of the stories take place on the periphery of or outside St. Petersburg), but also the existence of protagonists who cannot be tied to any space, as well as the lack of any existential context, point to the fact that the city cannot be perceived as a whole; indeed, it is reduced to inward spaces (like rooms, houses, baths, markets) which do not maintain any organic relation to the city with its multilevel semantic meanings. Petersburg is no longer a mythological substratum, but a blurred, incomprehensible monster, which can only be perceived through pointillistic, isolated sensations:

And everywhere, like a climatic specificity, one can feel the stench of rotten curd cheese, collected dirt and cigarette smoke. At the airport, in the bus, at the hotel, on the streets; one cannot escape it, only its composition changes. Now there is petrol, now garlic, now sewage. In the courtyards leftovers are added to it, in the stairwells pee. (Schulze 32)

In a number of cases one can observe that perception is related less to one spatial object or another (unlike in Bely's novel, where the protagonists' perception is determined by the structure, the silhouette and the canonical elements of the city). Here, it is connected to constantly moving subjects that cannot be grasped in their wholeness.

Each table on the balustrade was separated from the others by a huge pillar, we were sitting like in a box. The women were entirely hidden by the sunshades. Only the hands of the Vietnamese women were moving, like the light dots of a ball which became bigger and bigger and faster and faster moving towards the walls and the ceiling. (Schulze 77)

In this respect, the short story beginning with "It was a sunny day in April" plays a central role, since it intensifies the deformed, fantastic perception of the lethal outside world to such an extent that the perceiving subject itself is forced to abandon its body to death, which grotesquely exterminates any and all life:

The images started twisting faster: endless landscapes, drifting clouds, distant horizon, trees and meadows, sun and water. His lips were decaying, the shoulders were collapsing, the leg he was leaning on became shorter and shorter. A couple of movements remained [...] His thick legs jerked. With his knees under his chin, he covered his hideous smiling features. (Schulze 156)

The “cowering mass of flesh” is gradually “swept away” (Ibid.). This kind of heterogeneity and lack of substance cannot be integrated into any predominant connection: the grotesque, the distorted and the fantastic break through over and over again (cf. Timmerman). This constellation is excellently illustrated in the third short story of the volume, which starts with an everyday scene in a marketplace but ends in a mystical and fantastical ritual act, in which the narrator becomes the subject of worship in a fanatic mass, although the story then reverts back to a realistic ending (cf. Schulze 32-40). While in Bely’s novel even the fantastic is integrated into one of the two versions of perception, Schulze’s stories abolish any kind of reference points to which unrealistic events can be related. The singularity and isolation of the protagonists, as well as their pointillistic perceptive mode evokes the image of the rhizome as it appears in the introductory essay in *A Thousand Plateaus. Capitalism and Schizophrenia* [*Mille plateaux. Capitalisme et schizophrénie*] by Félix Guattari and Gilles Deleuze (3-25).

RHIZOMATIC PETERSBURG

The organizing principle in Schulze’s stories is neither a hierarchical nor somewhat structured construction, but rather an extremely loose connectivity. This rhizomorphic texture is characterized by the fact that it “may be broken, shattered at a given spot”; it consists of accidental, “asignifying ruptures,” “lines of flight” (Deleuze and Guattari 9), in which “semiotic chains of every nature are connected to very diverse modes of coding [...] that bring into play not only different regimes of signs but also states of things of differing status” (7). The semiotic chain, which emerges as a result of abandoning meaningful language and having only occasional coincidences, becomes:

[...] like a tuber agglomerating very diverse acts, not only linguistic, but also perceptive, mimetic, gestural, and cognitive: there is no language in itself, nor are there any linguistic universals, only a throng of dialects, patois, slangs, and specialized languages. (Ibid.)

It seems to me significant that Guattari and Deleuze interpret the rootless Amsterdam (that served as a model for Peter the Great when founding St. Petersburg) as a rhizomatic city and mention it immediately before their examination of the structure of the brain:

[...] the brain is not rooted or ramified matter. What are wrongly called ‘dendrites’ do not assure the connection of neurons in a continuous fabric. The discontinuity between cells, the role of the axons, the functioning of the

synapses [...] make the brain a multiplicity immersed in its plane of consistency [...]. (15)

As opposed to *small world* theory, Deleuze and Guattari assume that rhizomorphic organization is a constellation which brings non-hierarchical levels, ruptures, heterogeneous states and different dimensions into some temporary relation by laying out and reflecting these non-unities onto each other so that lines of flight emerge:

[...] unlike trees or their roots, the rhizome connects any point to any other point [...]; it brings into play very different regimes of signs, and even non-sign states. [...] It is composed not of unites but of dimensions, or rather directions of motion. [...] It constitutes linear multiplicities with n dimensions having neither subject nor object, which can be laid out on a plane of consistency, and from which the One is always subtracted ($n - 1$). (21)

This vision of a rhizomorphic model describes a web-like constellation without any structure, in the same way that Schulze's short stories reflect real and unreal events and their perception is lacking any particular subject or object in the city. Exposed to randomness, to illusionary dialogic relations of intersubjectivity, as well as their extreme rootlessness and the fantastic-grotesque events emerging from this state, the lonesome protagonists are merely perceptible as deprived of any cohesion. The city as rhizome, in which only co-variants exist and function, can be awakened to life only through the random glance of an observer who might be able to give it some seeming meaning.[15] On this point, one of the assumptions of current perception theories seems to be proven: the subject is involved in the perceptual process to such an extent that hardly any external point of reference can be maintained outside of itself. No referential relations can be presented in this kind of defenseless existence.

Based on the above, one can question whether the endeavours of different disciplines (to give a more or less comprehensive image of web-like organizational patterns on different levels) remain a mere illusion, i.e. whether the concept of rhizomorphic connections is more adequately suited to grasp the phenomenon of today's global networks as they are manifested in a metropolis of our days.

Still, in this context the blind spot of the retina, which escapes participation in the perceptual process, can be interpreted as a dichotomised space. It remains a spot in which randomness might prevail, while at the same time assuring a territory for the imagination, which generates at least inner references and connections, albeit fictitious ones.

Schulze's Petersburg stories seem to remain in this area of rhizomatic unpredictability, while Bely's novel displays a switch from the blind spot to a space of heterotopy, where forecasting and a new type of inner seeing become possible.

ENDNOTES

- [1] The current study was prepared for the conference *Net Culture Science – Netz Kultur Wissenschaft* held in Budapest, December 11-13, 2003. The paper was presented on December 12, in the panel *Netzwerke in Bewegung II / Networks in Motion II*. The current text is a revised version of the paper.
- [2] Retina is in German *Netzhaut*, i.e. "net skin."
- [3] Unfortunately, Buchanan's book was available to me only in Hungarian translation.
- [4] Capra's book was available in German translation only.
- [5] See more in Lambert Wiesing's very vivid study on the conceptions of the philosophy of perception (Wiesing "Einleitung").
- [6] On perceptual patterns altering the force field of modern (Western European and North American) cities, and appearing in literary texts, see Brüggemann.
- [7] The notion of 'ratioid' stems from Robert Musil's works, however, it became widespread in the discourse of the Petersburg text, as well. It refers to the object of cognition; meanwhile the notion of rationalist(ic) would describe the subject of cognition. Cf. Musil.
- [8] Cf. one of the most comprehensive summaries in Lotman.
- [9] Léna Szilárd deals with these layers of the novel in her comprehensive study in Szilárd.
- [10] Cf. sections of Leonid Dolgoplov's study, which treat these features of the novel in connection with Rudolf Steiner's anthroposophy (Dolgoplov 211-228, 242-270).
- [11] Lachmann uses the word *Trugbild* (following the German translation of the novel), which corresponds to a mirage-like image stemming from the incorrect digestion of sensory perception. I preferred to translate the word with a certain descriptive mode ("visionary, deceptive image") in order to reflect and accentuate the semantics of an image which is primarily based on a visual experience. Cf. a number of parts of the novel recurring as motifs: "Far, far away, further than they should have been, the islands sank and knuckled down in scare, and the buildings knuckled down, the water seemed to sink, too: and the depth, the greenish mud seemed to flood over it in this very moment, and over this greenish mud the Nikolaj bridge was rattling and shaking." "Over there, where only a vague putrescence hovered, the dirty-coloured, blackish-grey Isaak [cathedral] started to outline vaguely, so that it finally had all its contours." (Bely 21, 310)
- [12] Entering this other space is, at the same time, a step against the lack of history in Petersburg: the father starts working on his memoirs; the son does research in an Egyptian library. Thus, another criterion of Foucault's heterotopias becomes

effective, that of the heterochrony (cf. "The heterotopia begins to function at full capacity when men arrive at a sort of absolute break with their traditional time," Foucault.)

- [13] Cf. the explicit references in the last part of the text, entitled "Selected notes of the publisher" (Schulze 269-270).
- [14] Already the subtitle of the volume refers to a number of "authors."
- [15] Cf. Wolfgang Höhl, who investigates the principles of contemporary town planning in regards of the city structure by including the theory of communication with reference to Deleuze and Guattari.

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